Rezenzia

By Professor Dr. Henrik Egbert

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Member of the scientific jury by the order 38-238/11.05.2023 issued by the Rector of Sofia University St. Kliment Ohridski on 01.06.2023.

1. Position

Competition for the position of "Professor" in the field 3.8. Economics (Risk Management, E-Management and Digital Economics - in Bulgarian and English/Управление на риска, е-управление и дигитална икономика на български и английски език) at the Faculty of Economics and Business Administration. The position was announced in the State Gazette number 24, page 58, on 17.03.2023.

2. Competition and candidate

Dozent Dr. DEconSc Anton Antonov Gerunov is the only candidate for the available position. All necessary documents to take part in the competition have been submitted. According to the pre-evaluation of the application the candidate reaches 1187.5 points and fulfills the minimum academic requirements for the position according to article 26 of the Act on Development of the Academic Staff in the Republic of Bulgaria.

The following assessment is based on the submitted documents.

2.1 Education and positions

The candidate has obtained a Bachelor's degree from Jacobs University Bremen (2009), a Magister's degree in Economics, Macroeconomics (2011) and two PhDs in Economics (Political Economy 2015 and Industrial Economics 2020), all from Sofia University St. Kliment Ohridski.

The candidate was assistant (2013 to 2015), senior assistant (2015 to 2017) and has been Dozent for Economics in the field of Risk Management and Methods for Public Policy Analysis at the 'Department of Industrial Economics and Management' since 2017. All positions were at the Faculty of Economics and Business Administration, Sofia University.

His professional duties included administrative tasks of the department and the faculty at different levels. He has been an active lecturer on the undergraduate and graduate level in Financial Economics, Digital Business and IT applications in economics at the Faculty of Economics and Business Administration as well as at the Philosophical Faculty of Sofia University. Since 2017 the candidate has been an academic adviser of eight magister's students and has been a member of the jury of three doctoral students. Between 2020 and 2023 he initiated and administered three projects at Sofia University.

2.2 Experience in public policy and the business sector

Besides his scientific activities at the faculty and university, the candidate was an active communicator of science as he was adviser to several government bodies and the public sector, particularly between 2011 and 2017. Of specific interest for the vacant position is his expertise in applied e-governance and administrative reforms. Additionally, the candidate has collected multiple experience in the field of business, particularly in financial risk management and IT security. All these positions are related to the applied political and business field of the vacant scientific position.

2.3 Publications

With respect to total publications he lists 52 publications including (1) 3 monographs, (2) 33 articles, (3) 7 studies, (4) 4 chapters in books, and (5) 5 other contributions. For Dr. Gerunov's application for the vacant position he selected the following publications for evaluation:

- [1] one single authored book in English (240 pages, 6 chapters) published at Springer,
- [2,3,4,5,6] five articles in the English language in reviewed, refereed and indexed journals (three are single authored, one with two co-authors, one with 3 co-authors)

- [7,8,9,10,11,12,13] seven single authored articles, six in English, one in Bulgarian, in non-refereed journals and proceedings,
- [14,15] two single authored studies in English published in internationally refereed journals,
- [16,17,18] three book chapters, and
- [19,20] two educational publications for teaching.

3. Evaluation of the scientific contributions of the candidate

Of specific importance for the vacant position are the publications submitted by the candidate for evaluation.

3.1 Content

In all his publications the candidate deals with a fundamental issue of social science: how to predict – most accurately – human decisions and, respectively, individual behavior. He puts this question in different economic and business contexts. The majority of his publications are either referring to forecasting behavior or analyzing behavior ex post. In doing so he applies an impressive variety of analytical tools and methods. The context of most papers is the digital economy [1,3,5,8,9] and related issues such as AI, machine learning [15] or big data, but he also addresses related ethical issues of an AI-run economy [16].

Since the research is put in this present dynamic period of change due to digitalization and new technologies, the work of the candidate focuses on two main fields of application. The first field is risk analysis and lies in the applied business/economic sphere [1,2,4,7,10,11]. The second field addressed is the political sphere and he investigates challenges for e-governance [6,12,13,14,17,18].

In the field of risk analysis and risk management his monograph [1] is an outstanding publication. Therein, he firstly outlines the scientific origin of the analysis of uncertainty and risk [chapter 1], then he provides an overview of standard risk metrics and its application to a case study [chapter 2], before addressing information assets and financial assets in the context of cryptocurrencies [chapter 3]. In the second part of the book the candidate shows the relevance of Social Network analysis for risk evaluation [chapter 4], before investigating rare

risks [chapter 5] and applies models from behavioral economics and economic psychology [chapter 6]. The candidate shows his ability to tackle a very complex and up-to-date topic on different abstraction levels of social theory. He convincingly merges and applies a variety of analytical methods through case studies. Most importantly, he addresses the topic through his own empirical contributions, which he partly published previously in separate studies. Moreover, the book makes apparent the candidate's skill to communicate complex contexts into a well-structured, readable and coherent text.

His ability to apply forecasting tools and risk analysis is demonstrated in a number of publications related to different settings in economics and business. Among them are applications to European stock markets [2,10] and the financial sector [11], for cryptocurrencies [4], forecasting firm default rates [7], or for forecasting customer support resolution times [8], as well as anomalous consumer behavior [9], employee behavior, online communication and house pricing [15].

In the field of e-governance he investigates inter alia critical factors that are necessary for a successful implementation of e-government [6]. He finds that it is not the budget that is the crucial constraint, but rather the qualification of individuals, technological aspects and mostly the organizational context. In other papers he addresses the problem of privacy and data protection in e-governance. He uses interviews to identify obstacles and drivers of privacy [12]. The same topic of 'privacy by design' is addressed from a methodological viewpoint by developing and testing a new methodology for e-government in Bulgaria [14, also 17,18]. In a more general view he accentuates the effects of open e-governance on democracy [13]. His main argument is - in line with traditional political economy and public choice theory - that open e-governance and e-participation provides procedural utility for citizens through reinforcing citizen rights.

The large variety of different models and analytical tools that the candidates applies throughout his scientific publications is impressive and demonstrates his scientific ability. Among others he uses Markov models [2], neural networks applications [3,7], laboratory experiments and virtual social networks [5], online questionnaires [6], classical algorithms such as logistic regression or random forest [7], automated machine learning [8], anomaly detection methods [9], Monte Carlo methods [11], or machine learning algorithms [15] among

others. The strength in many publications is the comparison of results generated by different models and tools thus providing an evaluation of methods in such applied contexts.

In his two textbooks [19,20] the candidate shows that he can communicate the research topics and methods with respect to cases of risk management, forecasting and programming to students of economics, finance, and business administration.

3.2 Citations

The candidate has received with 106 a considerable number of citations for his publications. Most of the citations are in English language journals and three publications have received more than 10 citations (Google Scholar, total of 107 citations July 2023).

3.3 Scopus and Web of Science

The candidate has 15 entries in Scopus, out of which six are related to chapters of his monograph [1]. His publications have received 22 citations in Scopus as of July 2023. In Web of Science he has 3 entries and 10 citations as of July 2023.

3.4 Evaluation

The candidate is an active writer and has published an impressive number of high qualitative scientific contributions to the scientific field of the vacant position. He shows, by using a very wide variety of methodological approaches, a deep scientific orientation to tackle problems of prediction and forecasting in different economic settings. He demonstrates that he is able to provide new and leading scientific contributions in the English and Bulgarian language as shown by the large number of citations he has received on his work. Since his most prestigious publications [1,3] have been published in 2022 and 2023 respectively, it can be expected that the number of total citations will be dynamically increasing. The number and the quality of the submitted publications exceeds by far the requirements of the vacant position. The candidate is highly qualified to fill the position.

4. Critical notes

The work of the candidate is strongly empirical. In some of his works more references to the

theoretical foundations of economic thought could enrich his work and would relate it to the

long traditions his work is based upon. He demonstrates this ability, particularly the in the first

chapter of his monograph [1]. In the same way his work on e-governance would profit from a

strong connection to the new political economy literature and public choice theories.

5. Conclusion

The candidate demonstrates with his professional vitae and his publications submitted for

review in the competition that scientifically he is excellently qualified for the position. The

same statement applies to his teaching activity and commitment, as well as his deep

engagement in public policy, which is closely related to the vacant position. I conclude that

the candidate fulfills all qualitative and quantitative requirements by the law in order to

receive the academic position of professor at the Faculty of Economics and Business

Administration at Sofia University.

I strongly recommend without any reservations to the Scientific Jury to select Dozent Dr.

DEconSc Anton Antonov Gerunov for the academic position of "Professor" in the competition

in the professional field 3.8 Economics (Risk Management, E-Management and Digital

Economics - in Bulgarian and English in Bulgarian and English) at the Faculty of Economics and

Business Administration.

riochschule Anhalt

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Member of the Jury

Prof. Dr. Henrik Egbert

Mellendorf, 14th July 2023

Prof. Dr. Henrik Egbert, Professor of Economics, Anhalt University of Applied Sciences

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